## Leadership and Management

- Chief Safety and Mission Assurance Officer concurs with the mishap classification level, investigation approach, and the Mishap Investigation Board (MIB) membership, and serve as an endorsing official for the mishap report for Type A mishaps, Type B mishaps, high visibility mishaps, and high visibility close calls.
- Chief Medical Officer shall serve as an endorsing official for Type A mishaps, Type B mishaps, high visibility mishaps and high visibility close calls involving fatality or injury.
- Office of the General Council shall develop and implement procedures for collateral investigations and review the endorsed mishap report as being prepared for public release.
- Mission AAs concur with the mishap classification level for Type A mishaps, Type B mishaps, high visibility mishaps, and high visibility close calls, serves as the appointing official for certain mishaps, serve as an endorsing official for mishaps for which he/she is an appointing official and provide funding to support investigations at their Centers and within their programs.
- ▶ CD and Director of Headquarters Operations shall determine the classification for all mishaps managed by his/her Center and obtain concurrence on this classification from the Chief Safety and Mission Assurance Officer and the Mission AAs for Type A Mishaps, Type B Mishaps, high visibility mishaps, and high visibility close calls. Also, serve as the appointing official for Type B mishaps, Type C mishaps, Type D mishaps and close calls occurring at his/her center and obtain concurrence from the Chief Safety and Mission Assurance Officer on MIB membership for Type B mishaps. Also, serve as the endorsing official for mishaps and close calls in which he/she is the appointing official.
- Contracting Officers incorporate applicable mishap and close call reporting and investigating procedures and corrective action requirements into all contracts and grants covering NASA programs and operations.

# Mishap/Close Call Process Timeline



YOUR PREPAREDNESS FOR AN AUDIT OF NASA MISHAP REPORTING, INVESTIGATING, AND RECORD KEEPING REQUIREMENTS WITH THESE SAMPLE AUDIT GUIDE QUESTIONS.

#### MANAGEMENT:

1. What is your Center's pre-mishap plan? Where is it located and is it controlled and maintained by a configuration management process? When is the information disseminated and to whom?

# **NOTIFICATION AND REPORTING:**

 Do all employees know to immediately notify emergency personnel and a supervisor, management official, or a safety/health staff member if witness to or involved in a mishap or close call?

#### INVESTIGATION:

 How is it ensured that the mishap investigation process is properly completed?

#### **CLOSE CALL AND MISHAP REPORTS:**

- Do supervisors complete the initial mishap or close call report?
- 2. Are mishap investigation records and physical evidence retained?

#### **CORRECTIVE ACTIONS:**

 Are Corrective Action Plans (CAPs) developed and submitted within 15 working days from being tasked?

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# NASA SAFETY AND MISSION ASSURANCE REQUIREMENTS

# NPR 8621.1

# NASA Mishap Reporting, Investigating, and Record Keeping

**Compliance Verification Guide** 



OFFICE OF SAFETY AND MISSION ASSURANCE

This brochure is intended to be used as a guide only, not as a replacement for the actual policy. To review the Mishap Reporting, Investigating, and Record Keeping Policy Requirements (NPR 8621.1) in its entirety, see

http://www.hq.nasa.gov/office/codeq/doctree/texttree.htm.

#### What is the objective of NPR 8621.1?

To establish requirements to report, investigate, and document mishaps, "close calls", and previously unidentified serious workplace hazards to prevent recurrence of similar accidents.

#### MISHAP CLASSIFICATION LEVELS

#### Type A - A mishap that resulted in Property

Damage: Total direct cost of mission failure and property damage of \$1,000,000 or more, loss of crewed aircraft hull, or occurrence of an unexpected aircraft departure from controlled flight (except high performance jet/test aircraft such as F-15, F-16, F/A-18, T-38, or T-34, when engaged in flight test activities). Injury: Occupational injury and/or illness resulting in a fatality, permanent total disability, or the hospitalization for inpatient care of 3 or more people within 30 workdays of the mishap.

# <u>Type B</u> – A mishap that resulted in Property

Damage: Total direct cost of mission failure and property damage of at least \$250,000 but less than \$1,000,000. Injury: Occupational injury and/or illness resulting in permanent partial disability or the hospitalization for inpatient care of 1-2 people within 30 workdays of the mishap.

# <u>Type C</u> – A mishap that resulted in Property

Damage: Total direct cost of mission failure and property damage of at least \$25,000 but less than \$250,000. Injury: Nonfatal occupational injury or illness that caused any workdays away from work, restricted duty, or transfer to another job beyond the workday or shift on which it occurred.

## Type D - A mishap that resulted in Property

**Damage:** Total cost of mission failure and property damage of at least \$1,000 but less than \$25,000. **Injury:** A mishap that caused any nonfatal OSHA recordable occupational injury and/or illness that does not meet the definition of a Type C mishap.

<u>Close Call</u> – **Property Damage:** Total direct cost of mission failure and damage is less than \$1,000, or occurrence or condition of employee concern in which there is no property damage but possesses the potential to cause a mishap. **Injury:** Minor injury requiring first aid, which possesses the potential to cause a mishap, or an occurrence or condition with no injury but possesses the potential to cause a mishap.

Within 1 hour, the Center Safety Office shall report a mishap to Headquarters by phone and the Center's Chief of Aircraft Operations shall notify the National Transportation Safety Board (NTSB) for mishaps involving aircraft.

## MINIMUM AUDIT POINTS FOR NPR 8621.1

#### **Plans**

- Director, Headquarters Operations (HQ Ops), and each Center Director (CD) shall develop a Center pre-mishap plan describing local mishap/close call notification, reporting, investigating, recording, and prevention policies/procedures.
  Objective Quality Evidence (OQE) – Center Pre-Mishap Plan
- Program/Project Manager shall develop a program/ project pre-mishap plan covering any information/ procedures required specifically by the program that are not covered in the Center's pre-mishap plans.
  - OQE Program/Project Pre-Mishap Plan
- The Mission AAs shall develop pre-mishap plans to support this NPR including procedures to notify, report, investigate, and record mishaps and close calls that involve Mission programs/projects/activities that are not managed by a Center, program, or project, where the mishap or close call occurs outside Center's gates.
  - OQE Mission Pre-Mishap Plan

#### Notification

- ▶ The Center Safety Office shall collect employee safety concerns, mishap reports, and close call reports through a Center process, review employee reports, verify they meet definitions of a mishap or close call, and report those that are consistent with definitions found in NPR 8621.1.
  - OQE Employee Safety Concerns, Mishap Reports, and Reports from Incident Reporting Information System (IRIS)
- Within 24 hours, the Center Safety Office shall ensure all NASA mishaps/close calls are reported to Headquarters electronically and recorded in the IRIS.
  - OQE Email Records (when available) and IRIS Reports
- Within 8 hours of a work-related mishap involving death of a Federal employee, or the hospitalization for inpatient care of 3 or more employees (if one is a Federal employee), the Center Safety Office shall notify the Occupational Safety and Health Administration (OSHA).
  - OQE Dated and timed Copy of Report to OSHA and OSHA 300 Log
- Center Chief of Aircraft Operations shall notify the NTSB of a mishap involving aircraft and submit NTSB Form 6120 to the NTSB within 10 workdays of the mishap or close call per requirements in NPR 8621.1.
  - OQE Completed Form 6120; Email Documenting Contact with the NTSB (when available)
- ► The Associate Administrator, Office of Public Affairs (AA/OPA) shall establish guidelines for the public release of mishap reports and related information. With the assistance of the Center Safety Office, Interim Response Team (IRT), Investigating Authority, and CD or Director, HQ Ops, the AA/OPA shall release information to the press and media (i.e., potential hazards that may affect the public, interim reports and the authorized mishap report).
  - OQE Center's Copy of Public Affairs Guidelines for Release of Information to the Press

## Investigation

- All written/verbal witness statements obtained from personnel shall be considered privileged and protected.
  - OQE Process for Marking, Storing, and Retaining Witness Statements
- The Appointing Official shall generate a formal memorandum for Type A, Type B, and high visibility mishaps, and high

- visibility close calls communicating the appointment of the Investigating Authority members, the chairperson, the exofficio representative, and the support staff.
- OQE Formal Memorandum
- The Appointing Official shall use guidelines in this NPR to determine the composition of the Investigating Authority. The Investigating Authority must consist of federal personnel and of an odd number of voting members. The members shall not be from the direct chain of authority responsible for day-to-day or line management oversight of the facility, area, or activity involved in the mishap, or have a vested interest in the outcome of the investigation. At least one member shall have completed NASA mishap investigation training within the last 3 years.
  - OQE Appointing Official's Process for Selecting Investigating Authority Members
- Supervisors shall initiate drug testing after a mishap if the mishap results in a fatality, personal injury requiring immediate hospitalization, or damage estimated in excess of \$10,000 to government or private property.
  - OQE Medical Report Indicating Number of Drug Tests Done as a Part of Mishap Investigation Process

#### Reporting

- Within 75 workdays of the mishap/close call, the Investigating Authority shall submit the completed and signed mishap report to the appointing official.
  - OQE Dated Mishap Report
- Within an additional 20 workdays, the Endorsing Officials shall provide their signed endorsement, recommendation for mishap report approval or rejection, and, when applicable, comments to the appointing official.
  - OQE Dated Endorsements
- Within an additional 10 workdays, import/export control, OPA, and legal counsel shall review the mishap report and specify in writing which sections of the mishap report that are authorized for public release.
  - OQE Emails/Phone Calls From Each Group Specifying What is Authorized for Public Release for Each Report
- Within an additional 10 workdays, Safety and Assurance Requirements Division or the Center Safety Office shall distribute the mishap report to appropriate NASA programs/organizations.
  - OQE Distribution Letter (if available)

#### **Corrective Action**

- When tasked by the Appointing Official, within 15 workdays, the responsible organization shall develop and submit the Corrective Action Plan (CAP) to the appointing official.
  - OQE CAP Date of Submittal
- Within 10 workdays of being tasked, the Designated Person/Team shall develop lessons learned and submit to the appointing official. Based on the results of the lessons learned review by legal, public affairs and import/export control, the appointing official shall either accept or reject the lessons learned and forward accepted lessons learned to the NASA Lessons Learned Information System (LLIS).

#### Recordkeeping

- The Center safety office shall ensure that the information recorded in IRIS is updated as new information becomes available and, at a minimum, verify information is up to date once every 30 days until the investigation is complete.
  - OQE IRIS Database Reports

OQE – NASA LLIS Reports